WHAT IS CLAIMED IS:

- A multilayer wiring structure for semiconductor devices, comprising:
 - a semiconductor substrate;
- at least one active region supplied with an electric power from a power-supply potential; and
- a plurality of power-supply lines for supplying with the electric power to said active region therethrough, said power-supply lines disposed at different layers of the multilayer wiring structure on said semiconductor substrate and being connected in parallel to each other.
- 2. A multilayer wiring structure for semiconductor devices, according to Claim 1, wherein a common power-supply line which is connected to the power-supply lines and which has a current-carrying capacity larger than that of each of the power-supply lines is provided between said power-supply potential and said active region.
- 3. A multilayer wiring structure for semiconductor devices, according to Claim 2, further comprising at least one power-supply pad connecting to said power-supply potential,

wherein said common power-supply line is provided

between said power-supply pad and said power-supply lines.

- 4. A multilayer wiring structure for semiconductor devices, according to Claim 2, wherein said common powersupply line is provided between said active region and said power-supply lines.
- 5. A multilayer wiring structure for semiconductor devices, according to Claim 2, wherein said common powersupply line is provided between said power-supply potential and said active region, with both ends thereof connecting to the power-supply lines.
- 6. A multilayer wiring structure for semiconductor devices, according to Claim 1, wherein said power-supply lines connect in parallel to the active regions.
- 7. A multilayer wiring structure for semiconductor devices, according to Claim 1, wherein said power-supply lines connect to said power-supply potential by a plurality of power-supply pads connecting in parallel to said power-supply lines.